Central Hooksett
WATER PRECINCT
Remember conserving our natural resources is always a good idea.

MANCHESTER WATER WORKS

NOVEMBER 2021

FREQUENTLY ASKED QUESTIONS ABOUT DRINKING WATER DISINFECTION AND PERIODIC FREE CHLORINE CONVERSIONS

Why is drinking water disinfected?

Disinfection of drinking water is critical to protecting consumers from disease-causing microorganisms, called pathogens, including bacteria and viruses. Disinfectants are very effective at inactivating or killing pathogens and have significantly benefited public health in developed nations since the early 1900s. For example, the incidence of typhoid fever was reduced by 1,000-fold in the U.S. in the last century by implementing drinking water disinfection.

What is chloramine?

Manchester Water Works uses chloramine disinfection, which consists of combining chlorinated water with small amounts of ammonia. It is commonly used for disinfection in public water systems in New Hampshire, the United States, and worldwide, and is preferred for reduced formation of disinfection byproducts and its long-lasting residual.

What are disinfection by-products?

Disinfection by-products (DBPs) are formed when disinfectants such as chlorine and chloramine react with natural organic matter in drinking water. The U.S. Environmental Protection Agency (EPA) regulates two groups of chlorine DBPs, TTHMs and HAA5 to minimize their health risks.

Is chloramine safe?

Yes. Water disinfected with chloramine is safe for drinking, cooking, bathing, and everyday use. The EPA, Centers for Disease Control, and the World Health Organization have determined that chloramine is a safe disinfectant and that water disinfected with chloramine within regulatory standards has no known or expected adverse health effects.

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Chloramine, like chlorine, must be removed from the water prior to use in dialysis machines and can be harmful to fish and amphibians. However, proper filters and de-chloramination products will address these concerns.

What is a free chlorine conversion?

Periodic chlorine conversions are a common maintenance practice by many chloraminating public water systems to reduce free ammonia and associated nitrifying bacteria (known as nitrification). Chlorine conversions can be used as a preventative strategy or to control nitrification that can diminish water quality. According to a 2016 EPA survey, 25%-40% of the utilities that use chloramine reported using free chlorine conversions to control nitrification.

Public water systems are encouraged to notify their customers prior to a chlorine conversion because changes in taste and odor may briefly occur.

Are there any disadvantages to a free chlorine conversion?

Even properly conducted free chlorine conversions can cause the water to temporarily have a slightly different taste and/or odor as compared to chloramines. Customers may notice these aesthetic differences depending upon where they draw water from the system, but there are no health effects associated with this change. In fact, Manchester practiced free chlorine disinfection for many years prior to converting to chloramine in 2006. Once the water system returns to using chloramine as the disinfectant, the taste and odor will return to normal.

Who can I contact if I have questions about my water quality?

This FAQ has been provided by MWW and customers are encouraged to contact Chris Culberson at the Central Hooksett Water Precinct's office at (603) 624-0608 extension 105 with any questions or concerns about their water quality.